

REMARKS

In the Office Action of July 29, 2003, the Examiner rejected claims 1-6, 8-14 and 16 under 35 USC §103(a) as being unpatentable over the combination of the Payne U.S. Patent No. 4,227,062 in view of the Rulseh U.S. Patent No. 3,992,960 and in further view of the newly cited Silveri U.S. Patent No. 6,007,693. Claims 7 and 15 were rejected under §103(a) based upon the same combination of references in further view of the Scalf U.S. Patent No. 4,430,540.

In the Office Action, claims 4 and 12 were allowed by the Examiner. Such action is hereby acknowledged and appreciated.

By the present amendment, claims 6-8 and 15-16 have been amended to depend upon allowed claims 4 and 12. Thus, based on the present amendment, dependent claims 6-8 and 15-16 are believed to be in condition for allowance.

Amended Independent Claims 5 and 13

By the present amendment, dependent claims 5 and 13 have been amended into independent form and are believed to present subject matter allowable over the combination of references cited by the Examiner in the outstanding Office Action.

Both independent claims 5 and 13 include the limitation that the duty cycle dial includes the plurality of settings that increase in value exponentially from a minimum setting to a maximum setting such that the duty cycle dial has a greater resolution near the minimum setting as compared to the maximum setting.

As set forth in the specification of the present application, the use of the exponential increase in the setting from the minimum setting to the maximum setting allows for a dramatic increase in resolution near the minimum setting. In this manner, a user is able to more accurately set the percentage of activation time at percentages near the minimum setting. For example, when the minimum setting is near 0%, the

exponential increase between the individual settings near the minimum setting allows the user to more accurately select the percentage as compared to a dial having linear settings.

In the Office Action, the Examiner primarily relied upon the Payne '062 patent to reject this limitation of the claims. However, upon further review of the Payne '062 patent, it is clear that the Payne reference does not teach utilizing a duty cycle dial that has settings that increase exponentially from a minimum setting to a maximum setting. Further, none of the references cited by the Examiner, including the Rulseh '960 patent, teach the exponential increase in settings such that the resolution of the settings is greater near the minimum setting as compared to the maximum setting. Therefore, since none of the references cited by the Examiner teach or suggest, nor render obvious, the subject matter included in independent claims 5 and 13, these claims are believed to be allowable over the combination of the cited references.

New Claim 20

By the present amendment, new independent claim 20 has been added to the application to round out the scope of protection to which the applicant is believed to be entitled. Independent claim 20 includes the limitation that the duty cycle dial include a plurality of settings that decrease in value exponentially from the maximum setting to the minimum setting. The exponential decrease in value allows the duty cycle dial to have a greater resolution near the maximum setting as compared to the minimum setting. Such feature of the invention is set forth in page 8, lines 1-6 of the present application and as such claim 20 does not introduce new subject matter into the application.

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Conclusion

Based on the present amendments, the applicant believes that claims 4-8, 12-13, 15-16 and 20 are now in condition for allowance. The Examiner is invited to contact the applicant's undersigned attorney with any questions or comments, or to otherwise facilitate prosecution of the present application.

Respectfully submitted,

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